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Responsiveness to Babies: Life-Situation Specific Sex Differences in Adulthood

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Abstract

Responsivity to babies was observed in 96 mature adults representative of three junctures of parenthood: parents of infants, parents of 8-9 year olds, and parents of adolescents. Among the measures used were reactions to an unfamiliar infant in a waiting room situation, interest in pictures of babies versus other objects, and sex-role concept and attitudinal questionnaires. Stage of family life cycle effected women's responsivity but not men's. New mothers displayed a heightened, generalized interest in babies which is optimally timed and functional in terms of sex-differentiated role requirements. A possible confounding between cohort effects and stage in the family life cycle was examined and rejected. Traditionally sex-typed behaviors were reinterpreted as life-situation specific rather than general traits.

Responsiveness to Babies: Life-Situation Specific Sex Differences in Adulthood

The developmental consequences of parenting on the child has received considerable attention in the psychological literature. However, the effects of the parenting experience on parents themselves has been relatively neglected. The present study examines the pattern of sex differences in responsivity to babies over the active parenting years. Investigations of sex differences among adults have typically focused on questionnaire or projective measures. In contrast, responsiveness to babies is an observable behavior of adaptive significance to both the family unit and to the larger societal structure: in order for a family or a culture to survive it must be responsive to its young.

While it is generally believed that substantial sex differences exist among adults in attraction to infants (Harlow, 1971), the evidence is inconclusive. Findings derived from homogeneous college populations are often interpreted as representative of adults in general, despite the fact that sex-role development continues throughout the life span. Methodologically, most research designs have been limited to examining reactions to 2-dimensional pictorial stimuli of babies (Berman, Abplanap, Cooper, Mansfield, & Shields, 1975; Berman, 1976; Bernick, 1966; Fullard & Reiling, 1976; Sternglanz, Grey & Murakami, 1977). The few studies which have actually observed responsiveness to a live baby have used children as subjects (Berman, Monda, & Myerscourgh, 1977; Feldman, Nash & Cutrona, 1977). Thus our knowledge of adult interest in and sensitivity to infants during the critical parenting years is largely anecdotal and unsystematic.

The findings of no sex differences among children in their reactions to babies and the emergence of a significantly greater interest among girls by

adolescence (Feldman, et al., 1977) may not be indicative or predictive of responsivity among adults. A review of the literature suggests no basis for assuming that the presence or absence of specific sex differences which exist in childhood will be consistent over time or development (Maccoby & Jacklin, 1974). Role demands at various points in the life cycle require differential sex-specific activities and behaviors from men and women, particularly during the stages of family formation. Sex-related attitudes and self-concepts are often adaptations to changing life situations (Abrahams, Feldman, & Nash, 1978). Unlike the transitory situational manipulations typically studied by psychologists, stages in the family life cycle represent an important, pervasive influence on the individual — one which affects daily life choices and self attributions. Since sex differences serve a function at the time they are manifest, sex-related behavioral differences in reactivity to babies should vary according to stage of life, given the profound changes in life situation that occur during adult development.

We have addressed the issue of sex differences in responsivity to babies by observing adults representative of three junctures of parenthood: parents of infants, parents of 8-9 year-olds, and parents of adolescents. In line with the commonplace (but inadequately documented) viewpoint (Bischof, 1976), we predicted changes in children's age-status had a more compelling influence on the lives of women than of men, and this would be reflected in significant stage of family life effects for women, but not men. Specifically, it was hypothesized that the adaptive function of reactivity to babies diminishes in significance as the caregiving prerogative of the mother becomes less exclusive in the later stages of parenthood. Men and women were expected to respond to babies differently since the demands of the parental roles are traditionally distinctive.

Method

Three groups of subjects were studied: parents whose youngest child was either an infant, aged 8-9, or 14-15 years. Names of parents were solicited from local school lists. Couples were called and asked to participate in a life cycle study of personality attitudes as they relate to picture preferences. Each subject was observed in a six-minute Waiting Room situation with an unfamiliar 6-10 month old baby and mother (confederate). While the subject was unoccupied and waiting for the questionnaire to arrive, interest in the baby was observed. After filling out a sex-role self-concept questionnaire, the subject was taken into another room where he/she operated a slide projector which controlled the length of time each of 30 pictures was exposed. After viewing the pictures, the subject reported the five pictures liked best.

The order of the two tasks (Waiting-Room and Visual Task) was balanced across sex, and across condition. At the end of the second task, subjects filled out several questionnaires and were debriefed.

Sample

Ninety-six white, middle-class subjects were observed at our laboratory. There were 16 men and 16 women from each of three stages in the family-life cycle, defined by the age of the youngest child in the family: parents of infants (6-12 months old), parents of 8-9 year olds and parents of 14-15 year olds. The ages of women and men were 30 and 32 years, 38 and 40 years, and 45 and 46 years respectively. The median educational level of the fathers was graduate work while for the mothers it was a bachelors degree. The mean number of children in the families was one for parents of infants, 2.6 for parents of 8-9 year olds and 2.8 for parents of adolescents.

Confederates

Eight Caucasian mother-baby confederate pairs participated in the research.

Half of the sample of babies, aged 5-11 months, were boys, half were girls. Previous research indicated baby's gender did not differentially effect subjects' responsiveness (Feldman & Nash, 1978). The mothers were 22-31 years old. Each confederate pair saw an average of 12 subjects equally distributed by sex, and representing at least two of the three stage of life groups.

Procedure

The Waiting Room Situation. In a 6-minute episode, while awaiting a questionnaire, subjects sat in a room across from two separated but equidistant confederates: a 6-10 month baby in a "lo-chair" and its mother. Observers behind mirrors used 6-sec. time-sampling to score looks, smiles, funny faces/gestures, talks, gives/shows object, proximity (i.e., within 3'), touch, and the target of these behaviors (adult confederate or baby). Baby's vocalizing and noisy playing were also recorded. Two scores were derived: (1) Responsiveness to Baby, a standardized composite score ($\bar{X}$ = 50, sd = 10), equaling the sum of the standardized scores of each of the above-mentioned seven behaviors directed to the baby, plus talking to the mother about the baby, and (2) Ignores Baby, a measure of contingent responsiveness, equaling the sum of the 6-sec. intervals in which the subject did not respond in either the same or the following interval to the baby's vocalization or to the onset of noise from the child's toy. This score, by its operational definition, has a modest negative correlation with responsiveness to baby. However it is possible to be high on responsiveness to baby and at the same time high on ignores baby, indicating the adult was controlling the interaction. Thus the measure provides important additional information on contingent responsiveness. Interobserver reliabilities from 32 subjects averaged 0.91.

The Perceptual Situation. Subjects controlled how long each of 30 slides (of objects, babies, and people) were viewed, while an Esterline Angus recorder

graphed the length of time each slide was on the screen. The order of the slides was varied for subjects according to a Latin Square. After the viewing, 5 favorites were chosen from photo replicas of the slides. Two measures were calculated: Picture Duration, the percentage of time spent looking at slides devoted to baby pictures, and Picture Preferences, the number of baby pictures among the favorite five.

The Questionnaires. The Bem Sex Role Inventory (B.S.R.I.) (Bem, 1974) and the Miller Masculine and Feminine Interest Questionnaire were administered.

(i) The Bem Sex Role Inventory (Bem, 1974) assesses masculinity and femininity independently of one another within an individual. It consists of 60 adjectives (20 masculine, 20 feminine, and 20 neutral) on which the person rates himself using a 7-point scale (ranging from very like me, to very unlike me). Each person obtains a masculine score (the subject's mean rating on the masculine items) and a feminine score (the mean rating on the feminine items).

(ii) The Feminine Interest Questionnaire (FIQ) and Masculine Interest Questionnaire (MIQ) (Miller, 1974) were administered to females and males respectively. The scales assess attitudes towards the traditional roles of men and women. The FIQ consists of 31 items and MIQ consists of 32 items which subjects rate on four-point Likert-type scales. A previous factor analysis of the items revealed among the six identified factors a Child-and-Family Orientation, and a Modern Traditional Scale which were used in this research. A high score reflects a Child-and-Family Orientation on the one scale, and a Modern orientation emphasizing equality of spouse roles on the other. These questionnaries are described more fully in Abrahams, Feldman and Nash, (1978).

Results and Discussion

The four measures of interest in babies were intercorrelated as shown in Table 1. The variables show a cohesive association for women, with five out

Insert Table 1 about here

of six correlations significant, while for men the different measures of interest in babies were largely uncorrelated, with only one out of six correlations significant. As a result, all further analysis were carried out separately by sex.

Non-parametric statistics were used since the variables were not normally distributed (Geary's test, D'Agostino, 1974) and the assumption of homoscedasticity were not met. Kruskal-Wallis Analysis of Variance (H) and Mann-Whitney (U) tests were used (see Siegel, 1956).

To assess whether the behavior of the confederate babies influenced the results Kendall-Tau correlations, calculated for each sex, were carried out between the number of vocalizations the baby elicited and each of the four dependent measures. None attained significance.

As evident from Table 2, and in accordance with our predictions, there

Insert Table 2 about here

were substantial effects of stage of family life cycle on interest in and reactivity to babies for women but not men. Specifically, compared to mothers of older children, mothers of infants were more responsive to baby ($U = 71$, $p < .05$), and spent more time looking at baby pictures (Picture Duration $U = 69.5$, $p < .05$). No differences were found between mothers of 8-9 and 14-15 year olds.

The heightened, generalized interest in infants displayed by new mothers is both optimally timed and functional in terms of their role requirements. Mothers of older children show some residual interest in babies, primarily in their public statements (Picture Preference) and public behavior (e.g., proximal bids, a component of Responsiveness to Baby), for which stage of life effects

were not significant. The phasing out of reactivity becomes more obvious in their covert reactions such as time spent looking at baby pictures, and time spent looking at baby (trimmed means 45.7, 34.6, 37.6, for mothers of infants, 8-9, and 14-15 year olds respectively, $U = 69.5$, $p < .05$).

Cross-sectional studies contain a potential confounding between cohort effects and stage of family life cycle. Perhaps the significant results for women are not due to systematic role changes as children grow older, but reflect cohort differences in exposure to socio-historical movements such as Women's Liberation. Both logical arguments and empirical evidence exist, however, against this interpretation. Logically, the cohort explanation would predict younger women to be more liberated in their sex-role behavior, and therefore less responsive to babies than older women. Our findings are exactly in the opposite direction: younger women are more interested in babies. Empirical data from questionnaires show that the three groups of women did not differ in their sex-role self concept nor in their sex-role attitudes. The mean femininity self-ratings from the B.S.R.I. ranged from 101.7 to 104.1, for the three stage of life groups, while the masculinity scores ranged from 90.5 to 92.5. In addition the three groups of women differed neither in their modern/traditional role orientation scores, which ranged from 33.2 to 33.9, nor in their child and family orientation scores, which ranged from 12.6 to 13.3. Thus, we can reject the interpretation that cohort effects account for the stage of life effects on women's responsiveness to babies.

For men, stage of life did not influence Responsiveness to Baby, but it did influence Picture Preference Score ($H = 5.95$, $p < .05$) and Picture Duration Score ($H = 6.63$, $p < .05$). There was a linear decrease across the stages of life in number of baby pictures chosen. Fathers of infants tended to choose more baby pictures than fathers of elementary school children ($U = 82$, $p < .10$) who, in turn, tended to choose more than fathers of adolescents ($U = 84$, $p < .10$).

Since this overt measure is unrelated to behavioral responsivity, it is possible that men are responding consistently with social expectations (new fathers should be interested in babies) rather than with how they actually feel. A U shaped curve was found for Picture Duration Scores; fathers of elementary school children looked less at baby pictures than did either fathers of infants ($U = 41$, $p < .01$) or fathers of adolescents ($U = 49$, $p < .05$).

Sex differences were evident as shown in Table 2. On all measures of interest in babies, women surpassed men. They were more responsive to baby ($H = 7.8$ $p < .01$), ignored baby less ($H = 3.2$, $p < .10$), chose more baby pictures ($H = 4.55$, $p < .05$) and spent longer viewing them ($H = 3.12$, $p < .10$).

In the waiting room, sex differences were strongest for parents of infants and diminished with subsequent stages. In particular, compared to fathers of infants, mothers of infants were more responsive to baby ($U = 57$, $p < .05$, and ignored baby less ($U = 78$, $p < .10$). Among parents of 8-9 year olds, mothers were somewhat more responsive to baby than were fathers ($U = 84$, $p < .10$,) while no sex differences in waiting room behaviors were found for parents of adolescents.

For the picture measures no sex differences were found among parents of infants, while mothers of elementary school children chose more baby pictures ($U = 72$, $p < .05$) and viewed them longer ($U = 51$, $p < .05$) than did fathers. Among parents of adolescents mothers tended to choose more baby pictures than did fathers ($U = 75$, $p < .10$).

Sex differences in responsivity are most prominent during the parent-of-infant stage when sex-differentiated role demands regarding babies are prevalent. Traditionally, caregiving has been the woman's domain, and even when responsibility is shared, she remains the executive decision-maker regarding the infant's well-being. By the time their children are adolescents, responsivity among men and women is basically comparable; differential interest in babies is no longer functional or necessary.

The possibility exists that the behavioral sex differences found among parents of infants were merely an artifact of the waiting room situation, specifically, the differentially inhibitory effect of the female confederate on the two sexes. In fact, the data reveal no sex differences in spontaneous conversation in the waiting room; the new fathers spoke to the confederate (in general and about her baby) as often as the mothers did. Thus, new fathers showed interest in every way short of actually interacting with the baby. They chose baby pictures as often as the women did, they looked at baby pictures just as long, and even conversed with the confederate about the baby as frequently. Yet they did not interact with the baby nearly as much as the women did. It seems paradoxical that men who have stereotypically been characterized as the "active" sex show their interest in such passive ways. Perhaps the active label has been inferred from behavior in masculine domains; women appear to be much more active in this traditionally female area, e.g., they are more instrumental, they pick up the baby more, etc. These findings suggest that sex-role stereotypes such as active-passive may not be general traits, but are more likely situation-specific, according to whether the situation is seen as primarily masculine or feminine.

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Table 1

Kendall-Tau Correlations Among the Measures of Interest in Babies, Separately by Sex

		Females			
		Responsiveness to Baby	Ignores Baby	Picture Preference	Picture Duration
Males	Responsiveness to Baby		-.59**	.26*	.22*
	Ignores Baby	-.55*		-.21*	-.18+
	Picture Preference	---	--		.30*
	Picture Duration	.18+	-.19+	--	

+ $p < .10$
* $p < .05$
** $p < .001$

Table 2

Trimmed Means of the Four Measures

of Interest in Babies, by Sex and Life Situation

	Parents of Infants	Parents of 8-9 yr. olds	Parents of 14-15 yr. olds
Responsiveness to Baby			
Women	56.8	50.1	49.4
Men	46.7	43.3	45.5
Ignores Baby			
Women	20.1	27.4	26.4
Men	50.7	40.1	36.8
Picture Duration			
Women	16.0	14.0	15.1
Men	14.9	12.9	14.2
Picture Preference			
Women	1.1	1.0	0.7
Men	1.0	0.6	0.1